

**Building Upon FM River:
Communicating the Health of the Red River of the North**

**River Keepers
Bob Backman
Executive Director
325 7th St. S.
Fargo, ND 58103
rkeepers@i29.net or riverkeepers@i29.net
701-235-2895
Fax number: 701-235-7394**

EPA Contact: Stacey Eriksen and Tina Laidlaw

Appendix B -REVIEW TEAM PROPOSAL CHECKLIST

Please CHECK the boxes for each component that your proposal meets and RETURN with your proposal

The purpose of the following checklist is to assist EPA in assuring all proposals are reviewed by the appropriate program experts and / or teams and is not intended to reflect priorities for funding. All proposals will be screened for eligibility under each of the grant programs described in the RFP and all eligible grant applications will be considered for funding. An EPA review panel will make the final determination regarding under which grant programs the project or separable components of a project may be considered.

- X I am willing to accept funding at a lower level than my request, or partial funding covering some project components, OR
☐ I am not willing to accept funding at a lower level than my request

Geographic & Special Emphasis Areas:

- ☐ 1-70 Corridor (Golden to Glenwood Springs)
☐ Upper Missouri River Basin
☐ Yellowstone River Corridor, Montana
☐ Missouri Wild and Scenic/Recreational Rivers, Montana/South Dakota
☐ Big Sioux River Basin, South Dakota
☐ Missouri River Mainstem Garrison reach, North Dakota
☐ Missouri River Mainstem Fort Peck reach, Montana/North Dakota
X Red River/Devils Lake Basin, North Dakota/Minnesota
☐ Cherry Creek Watershed, Colorado
☐ State/Tribal Unified Watershed Assessment high-priority watershed
☐ Watershed Affected by CBM Development (Montana, Wyoming, Utah, Colorado)
☐ Assessment or monitoring
☐ Volunteer Monitoring

Water Program:

- ☐ Pretreatment
☐ Biosolids
X Wet Weather (e.g. storm water, sanitary sewer overflows)
☐ Concentrated Animal Feeding Operations
☐ Wastewater
☐ Coal Bed Methane
☐ Mining
X Reduction, Prevention, or Elimination of Pollutants in Surface Water

Wetland Program areas:

- ☐ Project directly related to wetlands protection or assessment.

TMDL Development:

- ☐ End product is an assessment or monitoring information related to a 303(d) listed waterbody for the development of a TMDL
☐ End product is an assessment of a 303(d) listed waterbody
☐ End product is a TMDL for a 303(d) listed waterbody
☐ End product is implementation of a TMDL

Regional Geographic Initiative

- X Addresses Geographic and / or Special Emphasis areas listed above
X Addresses environmental issues on a landscape scale using a multi-media or multi-program approach
X Leverages resources from and builds relationships in a variety of programs and agencies aimed towards environmental results
☐ Creates a strategy/plan for focusing resources and community approaches to environmental problem-solving

Executive Summary

Project Title: Building Upon FM River: Communicating the Health of the Red River of the North

Hydrological Unit Code: 09020104

Name of Watershed: Red River Basin

Environmental Setting/Problems: The Red River of the North forms the border between Fargo, North Dakota and Moorhead, Minnesota. Both cities were established in their current locations because of the river. Over the years, the River has provided water for drinking and cleaning, transportation, food, ice for cooling, and recreation. In the last 50 years, the communities have lost touch with their connection to the Red River. As the communities have changed and evolved, many citizens don't understand where their drinking water comes from, where their storm water flows, or the recreational potential of the Red River. Perhaps the public's negative perception is due to the Red's turbidity, several recorded deaths at low head dams, and frequent flooding. For instance, studies show, much of the public falsely believes that the water quality is extremely poor. In addition, the public doesn't understand the connection between their actions and the health of the River.

Major Goals: The intent of "Building Upon FM River: Communicating the Health of the Red River of the North" is to use lessons learned from FM River, an EPA funded project that ends July 31, 2003, and build upon the accomplishments to date. The goals include: increase the amount of water quality data available for the Red River in the Fargo-Moorhead area; provide data that will allow trend analysis of water quality data; provide the public with expanded water quality information and best management practices through various communication tools; make citizens aware of the storm water system and their contribution to that system.

Project Summary: Specific activities within "Building Upon FM River: Communicating the Health of the Red River of the North" will include: expand the number of water quality monitoring sites from three to five; utilize volunteers to monitor these sites during times that they are available; develop one best management practice public service announcement; increase the information available on the current FM River website; develop information and education tools specific to public impact on storm water; and the development of a "RiverCaring Workshop", a tool to communicate best management practices to the public.

Funds Requested: \$30,000

Matching Funds or Funds Leveraged: In-kind contribution of water quality analysis from the Moorhead Water Treatment Plant of \$5000

Environmental Problem Description, Goals and Description of Project

The Red River of the North flows north about 545 miles from its source – the confluence of the Bois de Sioux and Otter tail Rivers in Breckenridge, Minnesota to Lake Winnipeg. It drops only 233 feet in elevation, or less than 6 inches per river mile, over that distance. Channel widths vary from under 200 feet to over 500 feet, with average depths at bank-full stage from 10 to 50 feet. The Red River drains a basin of about 17,000 square miles, much of which is the lake bed of former glacial Lake Agassiz. During its northward flow, waters of the Red River are joined by flow from 21 named tributaries.

The Red River Basin is a priority watershed for both North Dakota and Minnesota as well as an ecosystem protection program priority for EPA. It lies nearly at the center of the North American continent which results in wide weather extremes, with temperatures of over 100 degrees F in the summer and less than minus 30 degrees F in winter. While the river may flow over 100,000 cfs for short times in the spring or following heavy summer rains, the winter flows may be only a few hundred cfs with most of the river's surface covered with ice. Precipitation averages about 20 inches annually, most of which falls as rain in spring and early summer. Due to these precipitation extremes, the Red River's flow can vary from overflowing its banks to occasionally not flowing at all.

The Red River of the North forms the border between Fargo, North Dakota and Moorhead, Minnesota. Both cities were established in their current locations because of the river. The River provided water for drinking and cleaning, food, ice for cooling, and recreation. In the last 50 years, the communities have lost touch with their connection to the River. As the communities have changed and evolved, many citizens don't understand where their drinking water comes from, where their storm water flows, or the recreational potential of the Red River. Perhaps, due to the Red's turbidity, several deaths at low head dams, and frequent flooding, myths and falsehoods have increased regarding the Red River of the North. For instance, much of the public falsely believes that water quality is extremely poor. In addition, the public doesn't understand the connection between their actions and the health of the River. Segments of the Red River in the Fargo-Moorhead area on the state of North Dakota and state of Minnesota's 303 (d) list.

River Keepers is a 501 (c) 3 non-profit organization that was formed "to promote a renewed vision for the Red River of the North" in the Fargo, North Dakota – Moorhead, Minnesota (F-M) area. Established in 1990, River Keepers has a favorable history of working with the public, local units of government, state and federal agencies. River Keepers has been an advocate for river safety, environmental and recreational projects. For instance, River Keepers initiated the first dam rock slope retrofit of a low head dam on the Red River. River Keepers works with schools groups, community organizations and individual volunteers to develop and administer projects connected to the Red River. Projects such as Adopt-the-Red, a semi-annual riverfront cleanup program, has resulted in hundreds of volunteers being involved in a hands-on project that connects them to the River. The Cavity Replacement Program currently has over 500 wood duck nesting boxes built and placed in the F-M urban Red River corridor by volunteers. River Keepers is active in service-learning projects such as Paint the Drain (a storm drain stenciling awareness project), nature trail development and maintenance, and development of

communication tools. These and similar projects indicate River Keepers continuing commitment to the involvement of the community and connecting them to the Red River.

In 2001, EPA awarded River Keepers, Prairie Public Television, and the Energy and Environmental Research Center (EERC) an EMPACT grant, FM River, which ends July 31, 2003. Numerous non-funded partners such as the cities of Fargo and Moorhead, the Minnesota Pollution Control Agency, North Dakota Department of Health, and Moorhead Public Service contribute expertise and resources in meeting the project goals. FM River is a tool to communicate and protect the health of the Red River. An advisory committee has provided guidance regarding specific project activities. EERC has provided technical assistance, Prairie Public has provided a communication method, and River Keepers has coordinated outreach and volunteers.

River Keepers has proven it can be successful in managing a grant by meeting timelines for report deadlines, using resources responsibly, and efficiently and effectively carrying out grant goals and activities.

FM River is designed to help citizens understand the health of the Red River in the Fargo-Moorhead metropolitan area, promote stewardship of the Red River and other regional water resources, and provide accurate, timely information on the quality of the river, the main source of drinking water for 150,000 people in the community. The project involves both chemical and biological monitoring, the development of a comprehensive community water quality network, and strong education and community outreach components.

Outreach components have been general up to this point and have not included specific water quality data. Communication has been done through a brochure, a newsletter, electronic messages, slideshow presentations, a display, posters, and hands-on activities at events such as a youth fishing clinic and a youth water festival. In addition, Prairie Public Television will have produced 18 "WaterSpots", 30 second educational Public Service Announcements (PSA), by the end of the grant. By late spring, monitoring data results will be reported through the dedicated FM River Web site (www.fmriver.org). EERC is currently working on an easy way to manage the data and get it on the Web site. We would like to keep this Web site current so that residents and classrooms can access this data for more than just a couple of months. Participating government agencies and local news media outlets also help in outreach.

Currently three FM River sites are being monitored to determine the impact of the urban community on the Red River. During the summer, an additional site was monitored to assist Minnesota Pollution Control Agency and North Dakota Department of Health get more data for their Red River TMDLs. Feedback from potential volunteers has suggested that having more flexible volunteer hours would enable us to have more volunteers and to monitor more sites. Currently EERC is supervising the monitoring which is conducted during their normal work hours.

Both the cities of Fargo and Moorhead have enlisted River Keepers to assist in many of the public education, outreach, participation, and involvement best management practices of their Phase II Storm Water Plans. They have determined that River Keepers experience in working with the public lends itself to playing a major role in public education.

The intent of “Building Upon FM River: Communicating the Health of the Red River of the North” is to use lessons learned from FM River and build upon the accomplishments to date. The goals include:

- increase the amount of water quality data available for the Red River in the Fargo-Moorhead area;
- provide data that will allow trend analysis of water quality data;
- provide the public with expanded water quality information and best management practices through various communication tools;
- make citizens aware of the storm water system and their contribution to that system.

Specific activities within “Building Upon FM River: Communicating the Health of the Red River of the North” will include:

- expand water quality monitoring sites from three to five,
- utilize volunteers to monitor these sites during times that they are available,
- develop one best management practice public service announcement,
- increase the information available on the current FM River website
- develop information and education tools specific to public impact on storm water,
- develop a “RiverCaring Workshop”, a tool to communicate best management practices to the public.

River Keepers staff will provide overall project leadership and coordination. River Keepers staff will develop best management practices printed material and a display; recruit, train and manage volunteers; and coordinate a RiverCaring Workshop. River Keepers staff will expend 500 hours conducting and managing the activities of this project.

Prairie Public Television staff will participate in advisory group meetings, maintain the Web site and develop a PSA. Prairie Public Television will expend 40 staff hours. The new spot and previously produced PSAs will air during Prairie Public Broadcasting's run of schedule.

Outputs

- One Public Service Announcement will be produced and aired on Prairie Public Television.
- Display and printed material on a selected best management practice will be produced by River Keepers.
- Public Service Announcements produced during FM River will be re-aired on Prairie Public Television during “Building Upon FM River: Communicating the Health of the Red River of the North”
- The Web site will be expanded to include additional water quality data and information by Prairie Public when supplied by River Keepers.
- Two water quality monitoring sites will be added to the current volunteer monitoring program by River Keepers.

- A RiverCaring Workshop will be developed and presented to area residents to educate them about best management practices by River Keepers.
- An increased number of volunteers will be utilized to produce more water quality data and make the program more sustainable.
- Three quarterly and one final report will be produced and sent to EPA by River Keepers. Reports will include status of goals and activities, current financial status and copies of products produced.

Milestones

Month 1 & 2	Establish advisory committee Identify monitoring sites Recruit volunteers
Month 3	Train volunteers Identify best management practice to be addressed Produce quarterly report
Month 4-6	Produce PSA Produce display Produce printed materials Produce quarterly report
Month 9	River Caring Workshop Produce quarterly report
Month 2-12	Air previously produced PSAs Water quality monitoring Expand and maintain Web site
Month 12	Produce final report

Budget

Prairie Public for development of one PSA and airing PSAs.....	\$5000
Prairie Public for expansion and maintenance of Web site.....	\$5000
RiverCaring Workshop.....	\$4000
Display and printed material.....	\$3500
Advisory Committee expenses.....	\$500
Volunteer recruitment, training and management; establishment of monitoring sites; and data management.....	\$12,000

	\$30,000

In-kind water quality analysis....\$5000

Consolidated Funding Process
Attn: Jennifer Harris
US EPA Region 8 (8P-W)
999 18th Street, Suite 300
Denver, CO 80202-2466

November 27, 2002

Moorhead Public Service has long been a supporter of water quality monitoring of the Red River of the North. We take an active role on the Project Partner Committee. We are working with the EERC and other Project Partner members to incorporate our existing water quality information on to the FM River website to make the data more widely available.

We endorse and strongly support the application to Region 8, EPA by River Keepers for the project "Building Upon FM River: Communicating the Health of the Red River". Expanding upon the work conducted in FM River is important to this community and allows us to take advantage of the lessons that were learned in the FM River project.

Moorhead Public Service will provide in-kind services to "Building Upon FM River: Communicating the Health of the Red River" water quality testing services as we have for FM River. We estimate that our service to the "Building Upon FM River: Communicating the Health of the Red River" project has a value of \$5,000.

Sincerely,

Cliff McLain
Water Division Manager, PE

To Whom It May Concern:

Prairie Public Broadcasting would be excited to continue working with River Keepers on *"Building Upon FM River: Communicating the Health of the Red River of the North."*

In 2000, Prairie Public Broadcasting partnered with River Keepers of Fargo-Moorhead, and the Energy and Environmental Research Center (EERC) to develop *FM River* with the help of an Environmental Protection Agency's EMPACT grant. Other non-funded partners have contributed expertise and resources to the project. Those partners include: the cities of Fargo and Moorhead, the Minnesota Pollution Control Agency, North Dakota Department of Health, and Moorhead Public Service.

As part of the project, Prairie Public Broadcasting produced a half-hour show introducing the *FM River* project to the Fargo-Moorhead Community. Currently, seven to eight 30-second Public Service Announcements are being aired weekly on Prairie Public Television. Producer Ann Hall Anderson continues to produce additional Public Service Announcements focusing on what is *FM River* and how to become involved, environmental issues, water quality concerns and recreation/wildlife along the Red River.

Prairie Public Broadcasting has created the Web site, www.fmriver.org and continues to maintain it, as information from partners is generated. Through the Web site, citizens can learn more about the role of the Red River in the Fargo-Moorhead metropolitan area. As well, www.fmriver.org provides accurate and timely information on water quality, and topics covered in the Public Service Announcements produced by Prairie Public Television.

Prairie Public Broadcasting is proud to be part of this exciting project, which helps educate the public about water quality issues and how they impact the local river basin. Prairie Public Broadcasting's mission is to provide quality radio, television, and public media services that educate, involve, and inspire the people of the prairie region. *FM River* fits nicely with that mission. It is through projects like *FM River* that Prairie Public Broadcasting can help educate the public about the importance of preserving the region's water resources and water quality, while fostering a stewardship with local residents to help with this goal.

Sincerely,

Hope Deutscher
Lead Producer - RiverWatch

Consolidated Funding Process
Attn: Jennifer Harris
US EPA Region 8 (8P-W)
999 18th Street, Suite 300
Denver, CO 80202-2466

December 2, 2002

The City of Moorhead strongly supports the “Building Upon FM River: Communicating the Health of the Red River of the North” project being proposed by River Keepers. As an active participant on the FM River Project Partner Committee, we are working with the other Project Partner members to incorporate our existing water quality information on the FM River Web site to make the data more widely available. Building upon the information obtained and lessons learned in FM River is important so that the efforts expended to date will contribute to increased knowledge about the water quality of the Red River.

In our daily work, it has become obvious that the public does not have a clear understanding of basic river information and the effects their daily activities have on water quality within the Red River. The development of educational material and activities pertinent to EPA Phase II Storm Water Rules is important in teaching our residents good stewardship practices. We are committed to working with River Keepers on this project.

Please feel free to contact me at (218) 299-5386 should you have any questions or require additional information.

Sincerely,

Andrew T. Bradshaw
Civil Engineer I
City of Moorhead Wastewater

December 2, 2002

Consolidated Funding Process
Jennifer Harris
US EPA Region 8 (8P-W)
999 18 Street, Ste 300
Denver CO 80202-2466

The City of Fargo has been and is committed to remaining a supporter of River Keepers, a local non-profit organization dedicated to promoting education and awareness of issues relating to the Red River.

The City of Fargo is also a project partner in the FM River Project, and strongly supports River Keeper's application to EPA Region 8, for the project "Building Upon FM River: Communicating the Health of the Red River of the North." Information gained through this effort will be beneficial in educating area residents about the water quality of the Red River and promoting good stewardship. This in turn, will benefit the City of Fargo as we strive to implement our Storm Water Pollution Prevention Program in fulfilling the EPA Phase 2 Storm Water Rules.

Sincerely,

Lynn A. Brilz, P.E.
Storm Sewer Utility Engineer

LAB/pan

Consolidated Funding Process
Attn: Jennifer Harris
US EPA Region 8 (8P-W)
999 18th Street, Suite 300
Denver, CO 80202-2466

December 2, 2002

Dear Ms. Harris,

I am writing on behalf of the Clay County Local Water Plan Advisory Committee (LWPAC) in support of River Keepers grant application for the *Building Upon FM River: Communicating the Health of the Red River of the North*. The LWPAC is the local decision making body of the Clay County Comprehensive Local Water Plan, and is responsible for prioritizing activities and funding for local efforts to protect or improve water resources, and educate the public on the importance of doing so.

Clay County has long been a supporter of water quality monitoring of the Red River of the North. Clay County Water Planning and River Keepers often form partnerships to address water quality and demonstration projects. Such partnerships allow for greater exposure and enhanced project potential than doing individual projects. Examples of current projects include; working with the MN Department of Natural Resources and River Keepers on an urban streambank restoration demonstration project, initiating a public awareness campaign to curb dumping of yard waste into the Red River, and storm drain stenciling. To that end, Clay County supports the current efforts of River Keepers to provide current water quality information to the FM area. Further Clay County takes an active role in FM River activities through my position on the FM River Advisory Committee.

The Clay County Local Water Plan Advisory Committee endorses and strongly supports the application to Region 8, EPA by River Keepers for the project *Building upon FM River: Communicating the Health of the Red River*. Expanding upon the work conducted in FM River is important to this community and allows us to take advantage of the lessons that were learned in the FM River project.

Sincerely,

Steven C. Hofstad
Clay County Comprehensive Local Water Plan Coordinator